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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,551	09/26/2001	Bobby W. Sanders	26272/04003	5266

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EXAMINER	
DINH, TIEN QUANG	
ART UNIT	**PAPER NUMBER**
3644	

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/966,551	SANDERS ET AL.	
	Examiner	Art Unit	
	Tien Dinh	3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 33 and 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is not understood what the overboard bypass system works. How does it duct the air out of the inlet?

It is not understood how the variable area exit works. How is it variable?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 28-35 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koncsek et al.

Koncsek et al teaches an internal compression supersonic aircraft inlet that has an axi-symmetric internal duct with compression angled surfaces where substantially all of the

isentropic compressions take place, throat section, shock stability bleed system having one or more bleed passages 120, 122 so that the shockwave is maintained at the throat section (see figures 8, 9). Koncsek et al also teaches the bleed passages have a variable area exit/overboard bypass system 128 and the movable sidewalls/internal surfaces 50, 52, 54, 56 to provide supersonic compression of air to the inlet throat and subsonic diffusion to the engine entrance. As for the internal duct being rectangular, please note that in column 5, lines 44-56, Koncsek teaches using rectangular shapes on his system. The inlets and exterior surfaces are aligned and substantially parallel to the flow of air to the inlet. Please note that the Koncsek et al teaches that the "a horizontal cowl for use with a rectangular engine with the direction of flight..." which means that the external surfaces are substantially aligned with the airflow. See column 6.

Re claim 35, it would have been obvious to have made the internal duct elliptical in shape so as to allow certain aircrafts to reduce radar observability and to allow certain aircraft to operate more aerodynamically efficient.

Koncsek et al also teaches that one or more entire external surfaces are substantially aligned with the flow of the aircraft. In column 5, lines 51-57, Konseck et al teaches a rectangular engine. This teaches that the inlet/duct has external surfaces that are aligned with the flow of the aircraft. In addition, from figure 3, it seems to show that the external surfaces are aligned with flow of the aircraft.

Claims 18-27 and 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koncsek et al in view of Tindell.

Koncsek et al discloses all claimed parts (including centerbody, not numbered but is shown in figures 2-10, where it is between elements 31 and 33) except for the staggered leading edges. However, Tindell teaches that leading edges that are staggered are well known in the art.

It would have been obvious to one skilled in the art at the time the invention was made to have made the leading edges of Koncsek et al's staggered as taught by Tindell to accommodate certain aircrafts and to improve its aerodynamics.

Re claims 37, and 39, it would have been obvious to have made the internal duct elliptical in shape so as to allow certain aircrafts to reduce radar observability and to allow certain aircraft to operate more aerodynamically efficient.

Re claim 42, the exit of the inlet is near number 82. Therefore, the interior surface of the internal duct is continuous from the opening to the exit of inlet 82.

Response to Arguments

The Examiner has pointed out in Koncsek et al that the airflow is substantially aligned with the duct/inlet of the engine. This meets what has been claimed. Please see column 5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 703-308-2798. The examiner can normally be reached on 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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